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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,647	05/18/2000	Schelto van Doorn	00 P 7629 US	8087
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FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110				
			EXAMINER LEON, EDWIN A	
			ART UNIT 2833	PAPER NUMBER

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/574,647

Applicant(s)

VAN DOORN, SCHELTO

Examiner

Edwin A. León

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 1-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's Response filed February 19, 2004 has been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Curzio (U.S. Patent No. 5,611,013). With regard to Claim 1, Curzio discloses a transducer comprising a housing (1) mountable on a substrate (3), the housing (1) configured to receive a jumper cable (5, 7, 9), an input/output (I/O) lead (conductors inside 39, 45, Column 7, Lines 18-35) supported by the housing (1) and configured to contact an I/O lead (43) of an integrated circuit (37) mounted on the substrate (3) and electronic circuitry (inside 1) supported by the housing (1) to transition between an electronic data transfer protocol of the jumper cable (5, 7, 9) and an electronic data protocol of the integrated circuit (37). See Figs. 1-2 and 6.

With regard to Claim 2, Curzio discloses the transducer I/O lead (conductors inside 39, 45, Column 7, Lines 18-35) being configured to electrically connect to the integrated circuit (37) I/O lead (43) independently of any electrically conductive path of the substrate (3). See Figs. 1-2 and 6.

With regard to Claim 3, Curzio discloses the transducer I/O lead (conductors inside 39, 45, Column 7, Lines 18-35) being a configured to contact the integrated circuit (37) I/O lead (43) at a transducer surface substantially parallel to a mounting surface (upper surface of 3) of the substrate (3). See Figs. 1-2 and 6.

With regard to Claim 4, Curzio discloses the transducer I/O lead (conductors inside 39, 45, Column 7, Lines 18-35) being configured to contact a pin I/O lead (43) of the integrated circuit (37). It is the Examiner's opinion that lead (43) can be considered a pin lead since Applicant's lead has a curved shape but it still being considered a pin lead. See Figs. 1-2 and 6.

With regard to Claim 6, Curzio discloses the transducer I/O lead (conductors inside 39, 45, Column 7, Lines 18-35) being configured to contact the integrated circuit (37) I/O lead (43) at a transducer surface adjacent to a mounting surface (upper surface of 3) of the substrate (3). See Figs. 1-2 and 6.

With regard to Claim 7, Curzio discloses a power input lead (43) connectable to a power line (13) of the substrate (3). See Figs. 1-2 and 6.

With regard to Claim 8, Curzio discloses a transductional device (15). See Figs. 1-2 and 6 and Column 5, Lines 60-66.

With regard to Claim 9, Curzio discloses the transductional device (15) being an opto-electronic device (15). See Figs. 1-2 and 6 and Column 5, Lines 60-66.

With regard to Claim 10, Curzio discloses the transductional device (15) being an electronic device (15). Since the opto-electronic component (15) has some electronic circuits as mentioned in Column 5, Line 66, it is the Examiner's opinion that opto-electronic component (15) can be considered an electronic device. See Figs. 1-2 and 6 and Column 5, Lines 60-66.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Curzio (U.S. Patent No. 5,611,013) in view of Lemke et al. (U.S. Patent No. 6,024,584). Curzio discloses the claimed invention except for the transducer I/O lead being configured to contact a solder ball lead of the integrated circuit.

Lemke et al. discloses the use of solder balls leads (100) to connect an electrical connector (10) and a circuit board (204). See Figs. 5-6.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the transducer of Curzio by changing the lead from the

integrated circuit to a solder ball lead as taught in Lemke et al. in order to provide a more reliable electrical path between the transducer and the integrated circuit.

Response to Arguments

6. Applicant's arguments filed February 19, 2004 have been fully considered but they are not persuasive. In response to Applicant's arguments regarding Claim 1, that the Curzio reference does not show the lead supported by the housing being directly contacting the lead for the integrated circuit mounted in the substrate, Applicant's attention is directed to Fig. 6 and Column 7, Lines 18-35 in which Curzio clearly discloses input/output (I/O) lead (conductors inside 39, 45, Column 7, Lines 18-35) supported by the housing (1) and configured to contact an I/O lead (43) of an integrated circuit (37) mounted on the substrate (3).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800, extension 33. The fax

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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Edwin A. Leon

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AU 2833

EAL
May 31, 2004

Gary V. Paumen

Gary Paumen
Primary Examiner